

WE CLAIM:

1. A valve security device for releasably securing the actuator on a fluid flow valve to provide a releasable securement of the valve in an inoperable position, said device comprising:

an inner body portion adapted to be disposed about the actuator on the valve and defining a first contact surface for engagement with the actuator;

an outer body portion disposed about and rotatably mounted on said inner body portion;

a valve cap defining a secondary actuator thereon and being removably secured to said outer body portion for rotation therewith;

an operating pin assembly carried by said outer body portion and movable between a first position wherein said pin assembly operatively couples said outer body portion to said inner body portion and said secondary actuator to the actuator on the valve and a second position wherein said outer body portion is uncoupled from said inner body portion and freely rotatable thereon and said pin assembly operatively couples said valve cap to said outer body portion so as to prevent removal of said cap from said outer body portion whereby removal of said outer body portion from said inner body portion is prevented; and

a removable lock carried by said outer body portion and engaging said operating pin assembly so as to prevent movement of said pin assembly from said second position to said first position thereby releasably securing the valve in an

inoperable position with said outer body portion of said device being secured to and freely rotatable about said inner body portion and the actuator on the valve.

2. The valve security device of claim 1 wherein said inner body portion defines a second contact surface and said operating pin assembly includes an engagement pin, a handle for moving said pin between an extended position and a retracted position and a spring for biasing said pin to the extended position, said pin engaging said second contact surface on said inner body portion in said extended position and operatively coupling said outer body portion to said inner body portion.

3. The valve security device of claim 1 wherein said outer body portion defines a locking channel therein, said operating pin assembly being displaced from said channel in said second position such that a portion of said lock can be extended through said channel and locked in place whereupon said portion of said lock obstructs at least a portion of said channel and prevents movement of said pin assembly to said first position, locking said pin assembly in said second position and securing said valve in an inoperable position.

4. The valve security device of claim 1 wherein said outer body portion defines a locking channel therein, said operating pin assembly at least partially obstructing said second channel in said first position and in said second position is displaced therefrom whereby in said second position a portion of said lock

can be extended through said channel and locked in place, obstructing at least a portion of said channel and preventing the movement of said pin assembly to the first position so as to lock said pin assembly in said second position and secure said valve in an inoperable position.

5. The valve security device of claim 1 wherein said inner and outer body portions define overlapping portions and including a protective cylindrical sleeve disposed about said overlapping portions so as to prevent unauthorized access to said inner body portion and the valve actuator when said operating pin assembly is in said second position.

6. The valve security device of claim 1 including an attachment member carried by said inner body portion of said device and adapted to engage a portion of said fluid flow valve for securing said inner body portion to the actuator on the valve and wherein said outer body portion extends about said attachment member to prevent unauthorized access thereto when said operating pin assembly is in said second position.

7. The valve security device of claim 1 including a fastening member releasably securing said outer body portion to said inner body portion, said fastening member being disposed below and covered by said valve cap upon said valve cap being secured to said outer body portion such that access to said fastening

member and removal of said outer body portion from said inner body portion is prevented.

8. The valve security device of claim 1 including a friction reducing member disposed about a portion of said inner body portion of said security device and between said inner and outer body portions thereof.

9. The valve security device of claim 1 wherein said valve cap has a retaining member depending therefrom, said retaining member cooperating with said operating pin assembly such that upon said assembly being disposed in said first position, said assembly is spaced from said retaining member so as to permit removal of said valve cap from said outer body portion of said device whereby said outer body portion can be removed from said inner body portion to provide access to the valve actuator and upon said operating pin assembly being disposed in said second position, said assembly obstructs movement of said retaining member, preventing removal of said valve cap from said outer body portion and thereby preventing removal of said outer body portion from said inner body portion.

10. The valve security device of claim 2 wherein said inner and outer body portions define overlapping portions and including a protective cylindrical sleeve disposed about said overlapping portions so as to prevent unauthorized access to said inner body portion and the valve actuator when said operating pin assembly is in said second position.

11. The valve security device of claim 2 wherein said outer body portion defines an operating channel therein communicating with said inner body portion, said engagement pin being disposed therein and defining a reduced diameter portion and wherein said valve cap has a retaining member depending therefrom, said retaining member defining a reduced diameter portion and cooperating with said engagement pin such that upon said operating pin assembly being disposed in said first position whereupon said engagement pin is in said extended position, said reduced diameter portion of said engagement pin is adjacent said reduced diameter portion of said retaining member so as to permit removal of said valve cap from said outer body portion of said device whereby said outer body portion can be removed from said inner body portion to provide access to the valve actuator and upon said operating pin assembly being disposed in said second position, whereupon said engagement pin is in said retracted position, said reduced diameter portion of said engagement pin is spaced from said reduced diameter portion of said retaining member such that said engagement pin obstructs the movement of said retaining member preventing removal of said valve cap from said outer body portion thereby preventing removal of said outer body portion from said inner body portion.

12. The valve security device of claim 3 wherein said inner and outer body portions define overlapping portions and including a protective cylindrical sleeve disposed about said overlapping portions so as to prevent unauthorized

access to said inner body portion and the valve actuator when said operating pin assembly is in said second position.

13. The valve security device of claim 5 wherein said sleeve is freely rotatable about said overlapping portions.

14. The valve security device of claim 7 wherein said valve cap has a retaining member depending therefrom, said retaining member cooperating with said operating pin assembly such that upon said assembly being disposed in said first position, said assembly is spaced from said retaining member so as to permit removal of said valve cap from said outer body portion of said device and removal of said fastening member whereby said outer body portion can be removed from said inner body portion to provide access to the valve actuator and upon said operating pin assembly being disposed in said second position, said assembly obstructs movement of said retaining member, preventing removal of said valve cap from said outer body portion and thereby preventing removal of said outer body portion from said inner body portion.

15. The valve security device of claim 10 wherein said sleeve is freely rotatable about said overlapping portions.

16. The valve security device of claim 12 wherein said sleeve is freely rotatable about said overlapping portions.

17. A valve security device for use with a lock of the type having a locking bar for releasably securing the actuator on a fluid flow valve to provide a releasable securement of the valve in an inoperable position, said device comprising:

an inner body portion adapted to be disposed about and engage the valve actuator such that rotation of said inner body portion effects corresponding rotation of the actuator to open and close the valve;

an outer body portion disposed about and rotatably mounted on said inner body portion and defining a locking channel therein;

a valve cap defining a secondary actuator thereon and being removably secured to said outer body portion for rotation therewith;

an operating pin assembly carried by said outer body portion and movable between a first position wherein said pin assembly operatively couples said outer body portion to said inner body portion and said secondary actuator to the actuator on the valve and a second position wherein said outer body portion is uncoupled from said inner body portion and freely rotatable thereon with said valve cap and said pin assembly operatively couples said valve cap to said outer body portion so as to prevent removal of said cap from said outer body portion and said outer body portion from said inner body portion; and

wherein upon inserting the locking bar of the lock through said locking channel when said pin operating assembly is in said second position, the locking bar at least partially obstructs said channel and prevents movement of said pin

assembly to said first position thereby releasably securing the valve in an inoperable position with said outer body portion of said device being secured to and freely rotatable about said inner body portion and the actuator on the valve.

18. The valve security device of claim 17 wherein said inner body portion defines a second contact surface and said operating pin assembly includes an engagement pin, a handle for moving said pin between an extended position and a retracted position and a spring for biasing said pin to the extended position, said pin engaging said second contact surface on said inner body portion in said extended position and operatively coupling said outer body portion to said inner body portion.

19. The valve security device of claim 17 wherein when said operating pin assembly is in said first position, said operating pin assembly obstructs at least a portion of said locking channel, preventing the insertion of the locking bar through said locking channel and the disabling of said securement device.

20. The valve security device of claim 17 wherein said inner and outer body portions define overlapping portions and including a protective cylindrical sleeve disposed about said overlapping portions so as to prevent unauthorized access to said inner body portion and the valve actuator when said operating pin assembly is in said second position.



21. The valve security device of claim 17 including an attachment member carried by said inner body portion of said device and adapted to extend through a portion of said fluid flow valve for securing said inner body portion to the actuator on the valve and wherein said outer body portion extends about said attachment member to prevent unauthorized access thereto when said operating pin assembly is in said second position.

22. The valve security device of claim 17 including a fastening member releasably securing said outer body portion to said inner body portion, said fastening member being disposed below and covered by said valve cap upon said valve cap being secured to said outer body portion such that access to said fastening member and removal of said outer body portion from said inner body portion is prevented.

23. The valve security device of claim 17 including a friction reducing member disposed about a portion of said inner body portion of said security device and between said inner and outer body portions thereof.

24. The valve security device of claim 17 wherein said valve cap has a retaining member depending therefrom, said retaining member cooperating with said operating pin assembly such that upon said assembly being disposed in said first position, said assembly is spaced from said retaining member so as to permit removal of said valve cap from said outer body portion of said device whereby said

outer body portion can be removed from said inner body portion to provide access to the valve actuator and upon said operating pin assembly being disposed in said second position, said assembly obstructs movement of said retaining member, preventing removal of said valve cap from said outer body portion and thereby preventing removal of said outer body portion from said inner body portion.

25. The valve security device of claim 18 wherein said inner and outer body portions define overlapping portions and including a protective cylindrical sleeve disposed about said overlapping portions so as to prevent unauthorized access to said inner body portion and the valve actuator when said operating pin assembly is in said second position.

26. The valve security device of claim 18 wherein when said locking pin assembly is in said first position, said operating pin assembly obstructs at least a portion of said locking channel, preventing the insertion of the locking bar through said locking channel and the disabling of said securement device.

27. The valve security device of claim 18 wherein said outer body portion defines an operating channel therein communicating with said inner body portion, said engagement pin being disposed therein and defining a reduced diameter portion and wherein said valve cap has a retaining member depending therefrom, said retaining member defining a reduced diameter portion and cooperating with said engagement pin such that upon said operating pin assembly

being disposed in said first position whereupon said engagement pin is in said extended position, said reduced diameter portion of said engagement pin is adjacent said reduced diameter portion of said retaining member so as to permit removal of said valve cap from said outer body portion of said device whereby said outer body portion can be removed from said inner body portion to provide access to the valve actuator and upon said operating pin assembly being disposed in said second position, whereupon said engagement pin is in said retracted position, said reduced diameter portion of said engagement pin is spaced from said reduced diameter portion of said retaining member such that said engagement pin obstructs the movement of said retaining member preventing removal of said valve cap from said outer body portion thereby preventing removal of said outer body portion from said inner body portion.

28. The valve security device of claim 19 wherein said inner and outer body portions define overlapping portions and including a protective cylindrical sleeve disposed about said overlapping portions so as to prevent unauthorized access to said inner body portion and the valve actuator when said operating pin assembly is in said second position.

29. The valve security device of claim 20 wherein said sleeve is freely rotatable about said overlapping portions.

30. The valve security device of claim 25 wherein said sleeve is freely rotatable about said overlapping portions.

31. The valve security device of claim 28 wherein said sleeve is freely rotatable about said overlapping portions.

32. A valve security device for use with a lock of the type having a locking bar for releasably securing the actuator on a fluid flow valve to provide a releasable securement of the valve in an inoperable position, said device comprising:

an inner body portion adapted to be disposed about and engage the valve actuator;

an outer body portion disposed about and rotatably mounted on the inner body and defining a locking channel therein;

a valve cap defining a secondary actuator thereon and being removably secured to said outer body portion for rotation therewith;

an operating pin assembly carried by said outer body portion and movable between a first position and a second position, in said first position said pin assembly operatively couples said outer body portion to said inner body portion whereby rotation of said secondary actuator effects corresponding rotation of the actuator on the valve to open and close the valve, and in said second position, said outer body portion is uncoupled from said inner body portion and freely rotatable thereon with said valve cap rendering said valve inoperative and said pin assembly

operatively couples said valve cap to said outer body portion thereby preventing removal of said cap from said outer body portion and said outer body portion from said inner body portion; and

wherein upon securing said lock with the locking bar extending through said locking channel said locking channel is at least partially obstructed and movement of said pin assembly to said first position is prevented, releasably securing said valve in an inoperable position with said outer body portion of said device being secured to and freely rotatable about said inner body portion and the actuator on said valve.

33. The valve security device of claim 32 wherein said inner body portion defines a slot therein adapted to receive an extended portion of said operating pin assembly in said first position whereby said outer body portion is operatively coupled to said inner body portion.

34. The valve security device of claim 32 wherein said inner body portion defines a slot therein and said operating pin assembly includes an engagement pin, a handle for moving said pin between an extended position and a retracted position and a spring for biasing said pin to the extended position, said pin extending into said slot in said inner body portion in said extended position and operatively coupling said outer body portion to said inner body portion.

35. The valve security device of claim 32 wherein said inner and outer body portions define overlapping portions and including a protective cylindrical sleeve disposed about said overlapping portions so as to prevent unauthorized access to said inner body portion and the valve actuator when said operating pin assembly is in said second position.

36. The valve security device of claim 32 including a fastening member releasably securing said outer body portion to said inner body portion, said fastening member being disposed below and covered by said valve cap upon said valve cap being secured to said outer body portion such that access to said fastening member and removal of said outer body portion from said inner body portion is prevented.

37. The valve security device of claim 32 including a friction reducing member disposed about a portion of said inner body portion of said security device and between said inner and outer body portions thereof.

38. The valve security device of claim 32 wherein said valve cap has a retaining member depending therefrom, said retaining member cooperating with said operating pin assembly such that upon said assembly being disposed in said first position, said assembly is spaced from said retaining member so as to permit removal of said valve cap from said outer body portion of said device whereby said outer body portion can be removed from said inner body portion to provide access to

the valve actuator and upon said operating pin assembly being disposed in said second position, said assembly obstructs movement of said retaining member, preventing removal of said valve cap from said outer body portion and thereby preventing removal of said outer body portion from said inner body portion.

39. The valve security device of claim 33 wherein said inner and outer body portions define overlapping portions and including a protective cylindrical sleeve disposed about said overlapping portions so as to prevent unauthorized access to said inner body portion and the valve actuator when said operating pin assembly is in said second position.

40. The valve security device of claim 35 wherein said sleeve is freely rotatable about said overlapping portions.